Scott M. Matheson, Governor Temple A. Reynolds, Executive Director Cleon B. Feight, Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

April 21, 1982

Mr. Claude A. Thormalen Union Carbide Corporation P.O. Box 94 Uravan, Colorado 81436

RE: Snowball-LaSal-Beaver Mine ACT/037/026 San Juan County, Utah

Dear Claude:

The Division appreciated your arrangement of the tour on April 6, 1982 of the above referenced mine sites. Accordingly, two areas of concern have developed.

While on tour April 6, 1982, a topsoil stockpile located directly east of the LaSal Mine and within fifty feet of the road was observed to be stabilized by a good growth of vegetation. However, on April 7, 1982 a photograph was taken of a bulldozer blading this pile into a highly disturbed configuration. Knowing that Union Carbide has preferred to leave certain reclamation efforts until mining has been completed, we are at a loss as to why this event occurred. Could you explain it to our satisfaction, please?

While on site we discussed with you certain commitments of the mining and reclamation plan arranged by Union Carbide for the Snowball-LaSal and Beaver Mine. These included the initiation of revegetation test plots and soil analyses. Though these intentions are four years old or more, nothing has been accomplished by Union Carbide to date.

Hoping to capitalize upon the concerned spirit evident in personnel now responsible for these matters the Division is forwarding the following suggestions as design parameters for developing an adequate soil analysis program; the primary step to initiation of a practical revegetation test plot research plan.

1. Soil samples should be collected from waste rock that may be different in character, e.g., Moss back source vs. Morrison or Shinarump. Varying strata within each member or formation may also provide sufficient mineral differences as to effect revegetation efforts; therefore, respective mine dumps should also be sampled.

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- 2. Laboratory tests will aid in detecting any soil physical or chemical conditions which may be detrimental to plant growth and to provide any nutrients shown to be deficient. These tests should include, but not be limited to, soil texture, pH, electrical conductivity sodium absorption ratio, boron, iron, lead, molybdenum, selenium, zinc, available nitrogen, available phosphorus, available potassium, soluble calcium, magnesium and sodium.
- 3. After completion of the analyses, results should be forwarded to the Division and in future consultation with Union Carbide, or a designated consultant, members of the staff will help design the previously indicated test plot program which has been neglected to date.

It will be necessary to arrange these analyses with a timeframe in mind. It is strongly recommended that the results be submitted no later than July 1, 1982 so that a seeding program may be initiated this fall for optimum results. The Division cannot recommend a specific laboratory, however, one should be contacted about required soil sampling frequency and methods requirements.

If I may be of further assistance in this matter please contact me.

Sincerely yours,

THOMAS N. TETTING ENGINEERING GEOLOGIST

cc: Tom Portle, OGM

TNI/cp